

**PATENT**/Docket No. 6210.N DV2  
Serial No. 10/022,471  
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(d)  $-\text{CO}-\text{NR}_{\text{N-2}}\text{R}_{\text{N-3}}$  where  $\text{R}_{\text{N-2}}$  and  $\text{R}_{\text{N-3}}$  are  $-\text{H}$  and  $\text{C}_1-\text{C}_4$  alkyl, and where  $\text{R}_{3-2}$  and  $\text{R}_{3-3}$  are taken with the attached nitrogen atom to form a ring selected from the group consisting of 1-pyrrolidinyl, 1-piperazinyl and 1-morpholinyl,

$\text{R}_{3-2}$  and  $\text{R}_{3-3}$  should be  $\text{R}_{\text{N-2}}$  and  $\text{R}_{\text{N-3}}$ , respectively.

It should read:

(d)  $-\text{CO}-\text{NR}_{\text{N-2}}\text{R}_{\text{N-3}}$  where  $\text{R}_{\text{N-2}}$  and  $\text{R}_{\text{N-3}}$  are  $-\text{H}$  and  $\text{C}_1-\text{C}_4$  alkyl, and where  $\text{R}_{\text{N-2}}$  and  $\text{R}_{\text{N-3}}$  are taken with the attached nitrogen atom to form a ring selected from the group consisting of 1-pyrrolidinyl, 1-piperazinyl and 1-morpholinyl,

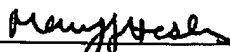
The R groups being discussed are  $\text{R}_{\text{N}}$  and not  $\text{R}_3$ . Please correct this typographical error.

#### CONCLUSION

Accordingly, it is believed that claims 24-25 are now in condition for allowance, early notice of which would be appreciated.

If any outstanding issues remain, Examiner is invited to telephone the undersigned to discuss the same. No fee is believed to be due for the submission of this response. Should any fees be required, please charge such fees or credit overpayment to Deposit Account No. 21-0718.

Respectfully submitted,

  
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Date: 16 September 2004

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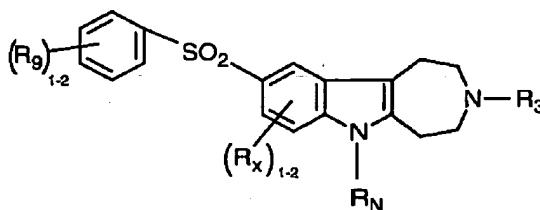
Amendment in Resp to 08/18/2004 Office Communication

## Specification

Please replace formula (XII) in the specification starting on page 1, line 26 and ending on page 4, line 11, as follows (previous amendments are incorporated):

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Disclosed is a 9-arylsulfone of the formula (XII)



where  $R_3$  is:

- (1) -H,
- (2)  $C_1-C_4$  alkyl,
- (3)  $C_0-C_4$  alkyl- $\phi$  where the  $\phi$  substituent is optionally substituted with 1 or 2
- (a) -F, -Cl, -Br, -I,
- (b) -O- $R_{3-1}$  where  $R_{3-1}$  is:
- H,
- $C_1-C_4$  alkyl,
- $\phi$ ,
- (c) -CF<sub>3</sub>,
- (d) -CO-NR<sub>3-2</sub>R<sub>3-3</sub> where  $R_{3-2}$  and  $R_{3-3}$  are -H and  $C_1-C_4$  alkyl, and
- where  $R_{3-2}$  and  $R_{3-3}$  are taken with the attached nitrogen atom to form a ring selected
- from the group consisting of 1-pyrrolidinyl, 1-piperazinyl and 1-morpholinyl,
- (e) -NH-SO<sub>2</sub>- $R_{3-4}$  where  $R_{3-4}$  is -H and  $C_1-C_4$  alkyl,
- (f) -NR<sub>3-2</sub>R<sub>3-3</sub> where  $R_{3-2}$  and  $R_{3-3}$  are as defined above,
- (g) -NR<sub>3-4</sub>-CO- $R_{3-4}$  where  $R_{3-4}$  is as defined above,
- (h) -SO<sub>2</sub>-NR<sub>3-2</sub>R<sub>3-3</sub> where  $R_{3-2}$  and  $R_{3-3}$  are as defined above,
- (i) -C $\equiv$ N,
- (j) -NO<sub>2</sub>,

where  $R_N$  is:

- (1) -H,
- (2)  $C_1-C_4$  alkyl,

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(3) C<sub>0</sub>-C<sub>4</sub> alkyl- $\phi$  where the - $\phi$  substituent is optionally substituted with 1 or 2

(a) -F, -Cl, -Br, -I,

(b) -O-R<sub>N-1</sub> where R<sub>N-1</sub> is

-H,

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C<sub>1</sub>-C<sub>4</sub> alkyl,- $\phi$ ,(c) -CF<sub>3</sub>,(d) -CO-NR<sub>N-2</sub>R<sub>N-3</sub> where R<sub>N-2</sub> and R<sub>N-3</sub> are -H and C<sub>1</sub>-C<sub>4</sub> alkyl, andwhere R<sub>[[3]]N-2</sub> and R<sub>[[3]]N-3</sub> are taken with the attached nitrogen atom to form a ring

10 selected from the group consisting of 1-pyrrolidinyl, 1-piperazinyl and 1-morpholinyl,

(e) -NH-SO<sub>2</sub>-R<sub>N-4</sub> where R<sub>N-4</sub> is -H and C<sub>1</sub>-C<sub>4</sub> alkyl,(f) -NR<sub>N-2</sub>R<sub>N-3</sub> where R<sub>N-2</sub> and R<sub>N-3</sub> are as defined above,(g) -NR<sub>N-4</sub>-CO-R<sub>N-4</sub> where R<sub>N-4</sub> is as defined above,(h) -SO<sub>2</sub>-NR<sub>N-2</sub>R<sub>N-3</sub> where R<sub>N-2</sub> and R<sub>N-3</sub> are as defined above,

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(i) -C $\equiv$ N,(j) -NO<sub>2</sub>,where R<sub>X</sub> is:

(1) -H

(2) -F, -Cl, -Br, -I,

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(3) -O-R<sub>X-1</sub> where R<sub>X-1</sub> is:

-H,

C<sub>1</sub>-C<sub>4</sub> alkyl,- $\phi$ ,(4) -CF<sub>3</sub>,

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(5) -CO-NR<sub>X-2</sub>R<sub>X-3</sub> where R<sub>X-2</sub> and R<sub>X-3</sub> are -H and C<sub>1</sub>-C<sub>4</sub> alkyl, and whereR<sub>X-2</sub> and R<sub>X-3</sub> are taken with the attached nitrogen atom to form a ring selected from

the group consisting of 1-pyrrolidinyl, 1-piperazinyl and 1-morpholinyl,

(6) -NH-SO<sub>2</sub>-R<sub>X-4</sub> where R<sub>X-4</sub> is -H and C<sub>1</sub>-C<sub>4</sub> alkyl,(7) -NR<sub>X-2</sub>R<sub>X-3</sub> where R<sub>X-2</sub> and R<sub>X-3</sub> are as defined above,

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(8) -NR<sub>X-4</sub>-CO-R<sub>X-4</sub> where R<sub>X-4</sub> is as defined above,(9) -SO<sub>2</sub>-NR<sub>X-2</sub>R<sub>X-3</sub> where R<sub>X-2</sub> and R<sub>X-3</sub> are as defined above,(10) -C $\equiv$ N,(11) -NO<sub>2</sub>;

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where R<sub>9</sub> is:

- (1) -H,
  - (2) -F, -Cl,
  - (3) C<sub>1</sub>-C<sub>4</sub> alkyl,
  - 5 (4) C<sub>1</sub>-C<sub>3</sub> alkoxy,
  - (5) -CF<sub>3</sub>,
  - (6) C<sub>0</sub>-C<sub>4</sub> alkyl- $\phi$  where the - $\phi$  substituent is optionally substituted with 1 or 2
    - (a) -F, -Cl, -Br, -I,
    - (b) -O-R<sub>9.1</sub> where R<sub>9.1</sub> is:
      - 10 -H,
      - C<sub>1</sub>-C<sub>4</sub> alkyl,
      - $\phi$ ,
      - (c) -CF<sub>3</sub>,
      - (d) -CO-NR<sub>9.2</sub>R<sub>9.3</sub> where R<sub>9.2</sub> and R<sub>9.3</sub> are -H and C<sub>1</sub>-C<sub>4</sub> alkyl, and
      - 15 where R<sub>9.2</sub> and R<sub>9.3</sub> are taken with the attached nitrogen atom to form a ring selected from the group consisting of 1-pyrrolidinyl, 1-piperazinyl and 1-morpholinyl,
      - (e) -NH-SO<sub>2</sub>-R<sub>9.4</sub> where R<sub>9.4</sub> is -H and C<sub>1</sub>-C<sub>4</sub> alkyl,
      - (f) -NR<sub>9.2</sub>R<sub>9.3</sub> where R<sub>9.2</sub> and R<sub>9.3</sub> are as defined above,
      - (g) -NR<sub>9.4</sub>-CO-R<sub>9.4</sub> where R<sub>9.4</sub> is as defined above,
      - 20 (h) -SO<sub>2</sub>-NR<sub>9.2</sub>R<sub>9.3</sub> where R<sub>9.2</sub> and R<sub>9.3</sub> are as defined above,
      - (i) -C $\equiv$ N,
      - (j) -NO<sub>2</sub>
    - (7) -OR<sub>9.1</sub> where R<sub>9.1</sub> is as defined above,
    - (8) -CO-NR<sub>9.2</sub>R<sub>9.3</sub> where R<sub>9.2</sub> and R<sub>9.3</sub> are as defined above,
    - 25 (9) -NR<sub>9.2</sub>R<sub>9.3</sub> where R<sub>9.2</sub> and R<sub>9.3</sub> are as defined above,
    - (10) -NH-SO<sub>2</sub>-R<sub>9.4</sub> where R<sub>9.4</sub> is as defined above,
    - (11) -NH-CO<sub>2</sub>-R<sub>9.2</sub> where R<sub>9.2</sub> is as defined above,
- and pharmaceutically acceptable salts thereof.